

SEQUENCE LISTING

<110> O'Brien, Timothy J.
Underwood, Lowell J.

<120> Extracellular Serine Protease

<130> D6020CIP4

<141> 2003-08-29

<150> US 09/796,294
<151> 2001-02-28

<160> 75

<210> 1
<211> 144
<212> PRT
<213> unknown

<220>
<221> DOMAIN
<223> Amino acid sequence of Protease m (Prom) catalytic domain

<400> 1
Trp Val Leu Thr Ala Ala His Cys Lys Lys Pro Asn Leu Gln Val
5 10 15
Phe Leu Glu Lys His Asn Leu Arg Gln Arg Glu Ser Ser Gln Glu
20 25 30
Gln Ser Ser Val Val Arg Ala Val Ile His Pro Asp Tyr Asp Ala
35 40 45
Ala Ser His Asp Gln Asp Ile Met Leu Leu Arg Leu Ala Arg Pro
50 55 60
Ala Lys Leu Ser Glu Leu Ile Gln Pro Leu Pro Leu Glu Arg Asp
65 70 75
Cys Ser Ala Asn Thr Thr Ser Cys His Ile Leu Gly Trp Gly Lys
80 85 90
Thr Ala Asp Gly Asp Phe Pro Asp Thr Ile Gln Cys Ala Tyr Ile
95 100 105
His Leu Val Ser Arg Glu Glu Cys Glu His Ala Tyr Pro Gly Gln
110 115 120
Ile Thr Gln Asn Met Leu Cys Ala Gln Asp Glu Lys Tyr Gly Lys
125 130 135
Asp Ser Cys Gln Gly Asp Ser Gly Gly
140

<210> 2
<211> 148
<212> PRT
<213> *Homo sapiens*

<220>

<222> DOMAIN
<223> Amino acid sequence of Tadg14 catalytic domain

<400> 2
Trp Val Val Thr Ala Ala His Cys Lys Lys Pro Lys Tyr Thr Val
5 10 15
Arg Leu Gly Asp His Ser Leu Gln Asn Lys Asp Gly Pro Glu Gln
20 25 30
Glu Ile Pro Val Val Gln Ser Ile Pro His Pro Cys Tyr Asn Ser
35 40 45
Ser Asp Val Glu Asp His Asn His Asp Leu Met Leu Leu Gln Leu
50 55 60
Arg Asp Gln Ala Ser Leu Gly Ser Lys Val Lys Pro Ile Ser Leu
65 70 75
Ala Asp His Cys Thr Gln Pro Gly Gln Asn Cys Thr Val Ser Gly
80 85 90
Trp Gly Thr Val Thr Ser Pro Arg Glu Asn Phe Pro Asp Thr Leu
95 100 105
Asn Cys Ala Glu Val Lys Ile Phe Pro Gln Lys Lys Cys Glu Asp
110 115 120
Ala Tyr Pro Gly Gln Ile Thr Asp Gly Met Val Cys Ala Gly Ser
125 130 135
Ser Lys Gly Ala Asp Thr Cys Gln Gly Asp Ser Gly Gly
140 145

<210> 3
<211> 146
<212> PRT
<213> unknown

<220>
<221> DOMAIN
<223> Amino acid sequence of trypsin like serine protease
(Try1) catalytic domain

<400> 3
Trp Val Val Ser Ala Gly His Cys Tyr Lys Ser Arg Ile Gln Val
5 10 15
Arg Leu Gly Glu His Asn Ile Glu Val Leu Glu Gly Asn Glu Gln
20 25 30
Phe Ile Asn Ala Ala Lys Ile Ile Arg His Pro Gln Tyr Asp Arg
35 40 45
Lys Thr Leu Asn Asn Asp Ile Met Leu Ile Lys Leu Ser Ser Arg
50 55 60
Ala Val Ile Asn Ala Arg Val Ser Thr Ile Ser Leu Pro Thr Ala
65 70 75
Pro Pro Ala Thr Gly Thr Lys Cys Leu Ile Ser Gly Trp Gly Asn
80 85 90
Thr Ala Ser Ser Gly Ala Asp Tyr Pro Asp Glu Leu Gln Cys Leu
95 100 105
Asp Ala Pro Val Leu Ser Gln Ala Lys Cys Glu Ala Ser Tyr Pro
110 115 120
Gly Lys Ile Thr Ser Asn Met Phe Cys Val Gly Phe Leu Glu Gly
125 130 135

Gly Lys Asp Ser Cys Gln Gly Asp Ser Gly Gly
140 145

<210> 4
<211> 144
<212> PRT
<213> unknown

<220>
<221> DOMAIN
<223> Amino acid sequence of stratum corneum chymotryptic enzyme (scce) catalytic domain

<400> 4
Trp Val Leu Thr Ala Ala His Cys Lys Met Asn Glu Tyr Thr Val
5 10 15
His Leu Gly Ser Asp Thr Leu Gly Asp Arg Arg Ala Gln Arg Ile
20 25 30
Lys Ala Ser Lys Ser Phe Arg His Pro Gly Tyr Ser Thr Gln Thr
35 40 45
His Val Asn Asp Leu Met Leu Val Lys Leu Asn Ser Gln Ala Arg
50 55 60
Leu Ser Ser Met Val Lys Lys Val Arg Leu Pro Ser Arg Cys Glu
65 70 75
Pro Pro Gly Thr Thr Cys Thr Val Ser Gly Trp Gly Thr Thr Thr
80 85 90
Ser Pro Asp Val Thr Phe Pro Ser Asp Leu Met Cys Val Asp Val
95 100 105
Lys Leu Ile Ser Pro Gln Asp Cys Thr Lys Val Tyr Lys Asp Leu
110 115 120
Leu Glu Asn Ser Met Leu Cys Ala Gly Ile Pro Asp Ser Lys Lys
125 130 135
Asn Ala Cys Asn Gly Asp Ser Gly Gly
140

<210> 5
<211> 159
<212> PRT
<213> unknown

<220>
<221> DOMAIN
<223> Amino acid sequence of hepsin (heps) catalytic domain

<400> 5
Trp Val Leu Thr Ala Ala His Cys Phe Pro Glu Arg Asn Arg Val
5 10 15
Leu Ser Arg Trp Arg Val Phe Ala Gly Ala Val Ala Gln Ala Ser
20 25 30
Pro His Gly Leu Gln Leu Gly Val Gln Ala Val Val Tyr His Gly
35 40 45
Gly Tyr Leu Pro Phe Arg Asp Pro Asn Ser Glu Glu Asn Ser Asn
50 55 60

Asp Ile Ala Leu Val His Leu Ser Ser Pro Leu Pro Leu Thr Glu
 65 70 75
 Tyr Ile Gln Pro Val Cys Leu Pro Ala Ala Gly Gln Ala Leu Val
 80 85 90
 Asp Gly Lys Ile Cys Thr Val Thr Gly Trp Gly Asn Thr Gln Tyr
 95 100 105
 Tyr Gly Gln Gln Ala Gly Val Leu Gln Glu Ala Arg Val Pro Ile
 110 115 120
 Ile Ser Asn Asp Val Cys Asn Gly Ala Asp Phe Tyr Gly Asn Gln
 125 130 135
 Ile Lys Pro Lys Met Phe Cys Ala Gly Tyr Pro Glu Gly Gly Ile
 140 145 150
 Asp Ala Cys Gln Gly Asp Ser Gly Gly
 155

<210> 6
 <211> 1360
 <212> DNA
 <213> *Homo sapiens*

<220>
 <223> Nucleotide sequence encoding Tumor Antigen Derived
 Gene-14 (TADG-14) protein; nt 1344-1360 NCBI accession
 #AA343629

<400> 6

ctgttagcagg	cagagcttac	caagtctctc	cgaactcaaa	tggaagaat	accttatgaa	60
tgtttaaatg	tagggggtca	tggcttgtaa	tttacacagt	gtaaatgaaa	ccatcctaga	120
ggatttatgg	gaatcccttc	tatgtgattt	tcaatcatag	caagcaagaa	aggctccagt	180
gtcaaggtag	ttcagctctt	acaggatata	aaacagtcca	tacttgagag	aaaaaaactta	240
gatctgagtg	atggaatgtg	aagcaaatct	ttcaaaatca	gttagacattt	cttggacata	300
aaacacagat	gagggaaaggg	cttcaaattt	gaagttacgt	aatcaccatc	agaaaagttca	360
tgtttggtaa	attctgttac	tagaaatgta	ggaaattcag	gtatacgctt	gaatcccaat	420
tacacattgg	tcagtggaaa	aactaaggc	ctccaaacagg	caaattcagg	gaggataggt	480
ttcagggaaat	gccctggatt	ctggaagacc	tcaccatggg	acgcccccg	cctcgtgcgg	540
ccaagacgtg	gatgttcctg	ctctgctgg	ggggagcctg	ggcaggacac	tccagggcac	600
aggaggacaa	ggtgctgggg	ggtcatgagt	gccaacccca	ttcgacgcct	tggcaggcgg	660
ccttggcca	gggcagcaa	ctactctgtg	gcgggtgcct	tgttaggtggc	aactgggtcc	720
ttacagctgc	ccactgtaaa	aaaccgaaat	acacagtacg	cctggagac	cacagcctac	780
agaataaaaga	tggcccagag	caagaaatac	ctgtggtca	gtccatccca	caccctgtct	840
acaacagcag	cgatgtggag	gaccacaacc	atgatctgat	gcttcttcaa	ctgcgtgacc	900
aggcatccct	ggggtccaaa	gtgaagccca	tcagcctggc	agatcattgc	acccagcctg	960
gccagaagtg	caccgtctca	ggctggggca	ctgtcaccag	tccccgagag	aattttctgt	1020
acactctcaa	ctgtcagaaa	gtaaaaatct	ttccccagaa	gaagtgtgag	gatgcttacc	1080
cggggcagat	cacagatggc	atggctgtg	caggcagcag	caaagggct	gacacgtgcc	1140
agggcgattc	tggaggcccc	ctgggtgtg	atggtgcact	ccagggcatc	acatcctggg	1200
gctcagaccc	ctgtgggagg	tccgacaaac	ctggcgtcta	taccaacatc	tgcgcgtacc	1260
tggactggat	caagaagatc	ataggcagca	agggctgatt	ctaggataag	cactagatct	1320
cccttaataa	actcacaact	ctctgaaaaaa	aaaaaaaaaa			1360

<210> 7
 <211> 260
 <212> PRT
 <213> *Homo sapiens*

<220>

<223> Amino acid sequence of TADG-14 protein

<400> 7

Met	Gly	Arg	Pro	Arg	Pro	Arg	Ala	Ala	Lys	Thr	Trp	Met	Phe	Leu
5									10					15
Leu	Leu	Leu	Gly	Gly	Ala	Trp	Ala	Gly	His	Ser	Arg	Ala	Gln	Glu
									20					25
														30
Asp	Lys	Val	Leu	Gly	Gly	His	Glu	Cys	Gln	Pro	His	Ser	Gln	Pro
									35					40
														45
Trp	Gln	Ala	Ala	Leu	Phe	Gln	Gly	Gln	Gln	Leu	Leu	Cys	Gly	Gly
									50					55
														60
Val	Leu	Val	Gly	Gly	Asn	Trp	Val	Leu	Thr	Ala	Ala	His	Cys	Lys
									65					70
														75
Lys	Pro	Lys	Tyr	Thr	Val	Arg	Leu	Gly	Asp	His	Ser	Leu	Gln	Asn
									80					85
														90
Lys	Asp	Gly	Pro	Glu	Gln	Glu	Ile	Pro	Val	Val	Gln	Ser	Ile	Pro
									95					100
														105
His	Pro	Cys	Tyr	Asn	Ser	Ser	Asp	Val	Glu	Asp	His	Asn	His	Asp
									110					115
														120
Leu	Met	Leu	Leu	Gln	Leu	Arg	Asp	Gln	Ala	Ser	Leu	Gly	Ser	Lys
									125					130
														135
Val	Lys	Pro	Ile	Ser	Leu	Ala	Asp	His	Cys	Thr	Gln	Pro	Gly	Gln
									140					145
														150
Lys	Cys	Thr	Val	Ser	Gly	Trp	Gly	Thr	Val	Thr	Ser	Pro	Arg	Glu
									155					160
														165
Asn	Phe	Pro	Asp	Thr	Leu	Asn	Cys	Ala	Glu	Val	Lys	Ile	Phe	Pro
									170					175
														180
Gln	Lys	Lys	Cys	Glu	Asp	Ala	Tyr	Pro	Gly	Gln	Ile	Thr	Asp	Gly
									185					190
														195
Met	Val	Cys	Ala	Gly	Ser	Ser	Lys	Gly	Ala	Asp	Thr	Cys	Gln	Gly
									200					205
														210
Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Asp	Gly	Ala	Leu	Gln	Gly	Ile
									215					220
														225
Thr	Ser	Trp	Gly	Ser	Asp	Pro	Cys	Gly	Arg	Ser	Asp	Lys	Pro	Gly
									230					235
														240
Val	Tyr	Thr	Asn	Ile	Cys	Arg	Tyr	Leu	Asp	Trp	Ile	Lys	Lys	Ile
									245					250
														255
Ile	Gly	Ser	Lys	Gly										
									260					

<210> 8

<211> 260

<212> PRT

<213> *Mus sp.*

<220>

<223> Amino acid sequence of mouse neuropsin homologous to TADG-14; accession no. D30785

<400> 8

Met	Gly	Arg	Pro	Pro	Pro	Cys	Ala	Ile	Gln	Pro	Trp	Ile	Leu	Leu
									5					10
														15

Leu Leu Phe Met Gly Ala Trp Ala Gly Leu Thr Arg Ala Gln Gly
 20 25 30
 Ser Lys Ile Leu Glu Gly Arg Glu Cys Ile Pro His Ser Gln Pro
 35 40 45
 Trp Gln Ala Ala Leu Phe Gln Gly Glu Arg Leu Ile Cys Gly Gly
 50 55 60
 Val Leu Val Gly Asp Arg Trp Val Leu Thr Ala Ala His Cys Lys
 65 70 75
 Lys Gln Lys Tyr Ser Val Arg Leu Gly Asp His Ser Leu Gln Ser
 80 85 90
 Arg Asp Gln Pro Glu Gln Glu Ile Gln Val Ala Gln Ser Ile Gln
 95 100 105
 His Pro Cys Tyr Asn Asn Ser Asn Pro Glu Asp His Ser His Asp
 110 115 120
 Ile Met Leu Ile Arg Leu Gln Asn Ser Ala Asn Leu Gly Asp Lys
 125 130 135
 Val Lys Pro Val Gln Leu Ala Asn Leu Cys Pro Lys Val Gly Gln
 140 145 150
 Lys Cys Ile Ile Ser Gly Trp Gly Thr Val Thr Ser Pro Gln Glu
 155 160 165
 Asn Phe Pro Asn Thr Leu Asn Cys Ala Glu Val Lys Ile Tyr Ser
 170 175 180
 Gln Asn Lys Cys Glu Arg Ala Tyr Pro Gly Lys Ile Thr Glu Gly
 185 190 195
 Met Val Cys Ala Gly Ser Ser Asn Gly Ala Asp Thr Cys Gln Gly
 200 205 210
 Asp Ser Gly Gly Pro Leu Val Cys Asp Gly Met Leu Gln Gly Ile
 215 220 225
 Thr Ser Trp Gly Ser Asp Pro Cys Gly Lys Pro Glu Lys Pro Gly
 230 235 240
 Val Tyr Thr Lys Ile Cys Arg Tyr Thr Thr Trp Ile Lys Lys Thr
 245 250 255
 Met Asp Asn Arg Asp
 260

<210> 9
 <211> 262
 <212> PRT
 <213> *Homo sapiens*

<220>
 <223> Amino acid sequence of human glandular kallikrein
 (hHk2); accession no. P06870

<400> 9
 Met Trp Phe Val Leu Cys Leu Ala Leu Ser Leu Gly Gly Thr Gly
 5 10 15
 Ala Ala Pro Pro Pro Ile Gln Ser Arg Ile Val Gly Gly Trp Glu
 20 25 30
 Gly Glu Gln His Ser Gln Pro Trp Gln Ala Ala Leu Tyr His Phe
 35 40 45
 Ser Thr Phe Gln Cys Gly Gly Ile Leu Val His Arg Gln Trp Val
 50 55 60

<210> 10
<211> 261
<212> PRT
<213> *Homo sapiens*

<220>
<223> Amino acid sequence of Prostate Specific Antigen
(hPSA); accession no. P07288

<400>	10													
Met	Trp	Val	Pro	Val	Val	Phe	Leu	Thr	Leu	Ser	Val	Thr	Trp	Ile
					5					10				15
Gly	Ala	Ala	Pro	Leu	Ile	Leu	Ser	Arg	Ile	Val	Gly	Gly	Trp	Glu
					20					25				30
Cys	Glu	Lys	His	Ser	Gln	Pro	Trp	Gln	Val	Leu	Val	Ala	Ser	Arg
					35					40				45
Gly	Arg	Ala	Val	Cys	Gly	Gly	Val	Leu	Val	His	Pro	Gln	Trp	Val
					50					55				60
Leu	Thr	Ala	Ala	His	Cys	Ile	Arg	Asn	Lys	Ser	Val	Ile	Leu	Leu
					65					70				75
Gly	Arg	His	Ser	Leu	Phe	His	Pro	Glu	Asp	Thr	Gly	Gln	Val	Phe
					80					85				90
Gln	Val	Ser	His	Ser	Phe	Pro	His	Pro	Leu	Tyr	Asp	Met	Ser	Leu
					95					100				105

Leu Lys Asn Arg Phe Leu Arg Pro Gly Asp Asp Ser Ser His Asp
 110 115 120
 Leu Met Leu Leu Arg Leu Ser Glu Pro Ala Glu Leu Thr Asp Ala
 125 130 135
 Val Lys Val Met Asp Leu Pro Thr Gln Glu Pro Ala Leu Gly Thr
 140 145 150
 Thr Cys Tyr Ala Ser Gly Trp Gly Ser Ile Glu Pro Glu Glu Phe
 155 160 165
 Leu Thr Pro Lys Lys Leu Gln Cys Val Asp Leu His Val Ile Ser
 170 175 180
 Asn Asp Val Cys Ala Gln Val His Pro Gln Lys Val Thr Lys Phe
 185 190 195
 Met Leu Cys Ala Gly Arg Trp Thr Gly Gly Lys Ser Thr Cys Ser
 200 205 210
 Gly Asp Ser Gly Gly Pro Leu Val Cys Asn Gly Val Leu Gln Gly
 215 220 225
 Ile Thr Ser Trp Gly Ser Glu Pro Cys Ala Leu Pro Glu Arg Pro
 230 235 240
 Ser Leu Tyr Thr Lys Val Val His Tyr Arg Lys Trp Ile Lys Asp
 245 250 255
 Thr Ile Val Ala Asn Pro
 260

<210> 11
 <211> 244
 <212> PRT
 <213> *Homo sapiens*

<220>
 <223> Amino acid sequence of human protease m (hProM) ;
 accession no. U62801

<400> 11
 Met Lys Lys Leu Met Val Val Leu Ser Leu Ile Ala Ala Ala Trp
 5 10 15
 Ala Glu Glu Gln Asn Lys Leu Val His Gly Gly Pro Cys Asp Lys
 20 25 30
 Thr Ser His Pro Tyr Gln Ala Ala Leu Thr Tyr Ser Gly His Leu
 35 40 45
 Leu Cys Gly Gly Val Leu Ile His Pro Leu Trp Val Leu Thr Ala
 50 55 60
 Ala His Cys Lys Lys Pro Asn Leu Gln Val Phe Leu Gly Lys His
 65 70 75
 Asn Leu Arg Gly Arg Glu Ser Ser Gln Glu Gln Ser Ser Val Val
 80 85 90
 Arg Ala Val Ile His Pro Asp Tyr Asp Ala Ala Ser His Asp Gln
 95 100 105
 Asp Ile Met Leu Leu Arg Leu Ala Arg Pro Ala Lys Leu Ser Glu
 110 115 120
 Leu Ile Gln Pro Leu Pro Leu Glu Arg Asp Cys Ser Ala Asn Thr
 125 130 135
 Thr Ser Cys His Ile Leu Gly Trp Gly Lys Thr Ala Asp Gly Asp
 140 145 150

Phe Pro Asp Thr Ile Gln Cys Ala Tyr Ile His Leu Val Ser Arg
155 160 165
Glu Glu Cys Glu His Ala Tyr Pro Gly Gln Ile Thr Gln Asn Met
170 175 180
Leu Cys Ala Gly Asp Glu Lys Tyr Gly Lys Asp Ser Cys Gln Gly
185 190 195
Asp Ser Gly Gly Pro Leu Val Cys Gly Asp His Ile Arg Gly Leu
200 205 210
Val Ser Trp Gly Asn Ile Pro Cys Gly Ser Lys Glu Lys Pro Gly
215 220 225
Val Tyr Thr Asn Val Cys Arg Tyr Thr Asn Trp Ile Gln Lys Thr
230 235 240
Ile Gln Ala Lys

<210> 12
<211> 20
<212> DNA
<213> artificial sequence

<220>
<221> primer
<223> Sense primer for TADG14 specific PCR

<400> 12
acagtacgcc tgggagacca 20

<210> 13
<211> 20
<212> DNA
<213> artificial sequence

<220>
<221> primer
<223> Anti-sense primer for TADG14 specific PCR

<400> 13
ctgagacggt gcaattctgg 20

<210> 14
<211> 12
<212> PRT
<213> artificial sequence

<220>
<223> Peptide sequence of immunogenic poly-lysine
linked multiple antigen (T14-1) derived from
TADG-14 used to produce polyclonal antibodies

<400> 14
Lys Tyr Thr Val Arg Leu Gly Asp His Ser Leu Gln
5 10

<210> 15
<211> 12

<212> PRT
<213> artificial sequence

<220>
<223> Peptide sequence of immunogenic poly-lysine linked multiple antigen (T14-2) derived from TADG-14 used to produce polyclonal antibodies

<400> 15
Gly His Glu Cys Gln Pro His Ser Gln Pro Trp Gln
5 10

<210> 16
<211> 12
<212> PRT
<213> artificial sequence

<220>
<223> Peptide sequence of immunogenic poly-lysine linked multiple antigen (T14-3) derived from TADG-14 used to produce polyclonal antibodies

<400> 16
Leu Asp Trp Ile Lys Lys Ile Ile Gly Ser Lys Gly
5 10

<210> 17
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 55-63 of the TADG-14 protein

<400> 17
Gln Leu Leu Cys Gly Gly Val Leu Val
5

<210> 18
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 15-23 of the TADG-14 protein

<400> 18
Leu Leu Leu Leu Gly Gly Ala Trp Ala
5

<210> 19
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 60-68 of the TADG-14 protein

<400> 19
Gly Val Leu Val Gly Gly Asn Trp Val
5

<210> 20
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 61-69 of the TADG-14 protein

<400> 20
Val Leu Val Gly Gly Asn Trp Val Leu
5

<210> 21
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 49-57 of the TADG-14 protein

<400> 21
Ala Leu Phe Gln Gly Gln Gln Leu Leu
5

<210> 22
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 10-18 of the TADG-14 protein

<400> 22
Lys Thr Trp Met Phe Leu Leu Leu Leu
5

<210> 23
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 131-139 of the TADG-14 protein

<400> 23
Ser Leu Gly Ser Lys Val Lys Pro Ile

<210> 24
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 122-130 of the TADG-14 protein

<400> 24
Met Leu Leu Gln Leu Arg Asp Gln Ala
5

<210> 25
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 124-132 of the TADG-14 protein

<400> 25
Leu Gln Leu Arg Asp Gln Ala Ser Leu
5

<210> 26
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 170-178 of the TADG-14 protein

<400> 26
Thr Leu Asn Cys Ala Glu Val Lys Ile
5

<210> 27
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 208-216 of the TADG-14 protein

<400> 27
Cys Gln Gly Asp Ser Gly Gly Pro Leu
5

<210> 28
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 54-62 of the TADG-14 protein

<400> 28
Gln Gln Leu Leu Cys Gly Gly Val Leu
5

<210> 29
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 62-70 of the TADG-14 protein

<400> 29
Leu Val Gly Gly Asn Trp Val Leu Thr
5

<210> 30
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 191-199 of the TADG-14 protein

<400> 30
Gln Ile Thr Asp Gly Met Val Cys Ala
5

<210> 31
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 173-181 of the TADG-14 protein

<400> 31
Cys Ala Glu Val Lys Ile Phe Pro Gln
5

<210> 32
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 83-91 of the TADG-14 protein

<400> 32
Leu Gly Asp His Ser Leu Gln Asn Lys

<210> 33
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 183-191 of the TADG-14 protein

<400> 33
Lys Cys Glu Asp Ala Tyr Pro Gly Gln
5

<210> 34
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 192-200 of the TADG-14 protein

<400> 34
Ile Thr Asp Gly Met Val Cys Ala Gly
5

<210> 35
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 71-79 of the TADG-14 protein

<400> 35
Ala Ala His Cys Lys Lys Pro Lys Tyr
5

<210> 36
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 113-121 of the TADG-14 protein

<400> 36
Asp Val Glu Asp His Asn His Asp Leu
5

<210> 37
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 229-237 of the TADG-14 protein

<400> 37
Gly Ser Asp Pro Cys Gly Arg Ser Asp
5

<210> 38
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 111-119 of the TADG-14 protein

<400> 38
Ser Ser Asp Val Glu Asp His Asn His
5

<210> 39
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 28-36 of the TADG-14 protein

<400> 39
Ala Gln Glu Asp Lys Val Leu Gly Gly
5

<210> 40
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 217-225 of the TADG-14 protein

<400> 40
Val Cys Asp Gly Ala Leu Gln Gly Ile
5

<210> 41
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 241-249 of the TADG-14 protein

<400> 41
Val Tyr Thr Asn Ile Cys Arg Tyr Leu

5

<210> 42
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 247-255 of the TADG-14 protein

<400> 42

Arg Tyr Leu Asp Trp Ile Lys Lys Ile
5

<210> 43
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 7-15 of the TADG-14 protein

<400> 43

Arg Ala Ala Lys Thr Trp Met Phe Leu
5

<210> 44
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 42-50 of the TADG-14 protein

<400> 44

His Ser Gln Pro Trp Gln Ala Ala Leu
5

<210> 45
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 48-56 of the TADG-14 protein

<400> 45

Ala Ala Leu Phe Gln Gly Gln Gln Leu
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<210> 46
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 214-222 of the TADG-14 protein

<400> 46
Gly Pro Leu Val Cys Asp Gly Ala Leu
5

<210> 47
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 80-88 of the TADG-14 protein

<400> 47
Thr Val Arg Leu Gly Asp His Ser Leu
5

<210> 48
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 5-13 of the TADG-14 protein

<400> 48
Arg Pro Arg Ala Ala Lys Thr Trp Met
5

<210> 49
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 8-16 of the TADG-14 protein

<400> 49
Ala Ala Lys Thr Trp Met Phe Leu Leu
5

<210> 50
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 3-11 of the TADG-14 protein

<400> 50

Arg Pro Arg Pro Arg Ala Ala Lys Thr
5

<210> 51
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 162-170 of the TADG-14 protein

<400> 51

Ser Pro Arg Glu Asn Phe Pro Asp Thr
5

<210> 52
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 188-196 of the TADG-14 protein

<400> 52

Tyr Pro Gly Gln Ile Thr Asp Gly Met
5

<210> 53
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 133-141 of the TADG-14 protein

<400> 53

Gly Ser Lys Val Lys Pro Ile Ser Leu
5

<210> 54
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 73-81 of the TADG-14 protein

<400> 54

His Cys Lys Lys Pro Lys Tyr Thr Val
5

<210> 55
<211> 9
<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 179-187 of the TADG-14 protein

<400> 55

Phe Pro Gln Lys Lys Cys Glu Asp Ala
5

<210> 56

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 234-242 of the TADG-14 protein

<400> 56

Gly Arg Ser Asp Lys Pro Gly Val Tyr
5

<210> 57

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 246-254 of the TADG-14 protein

<400> 57

Cys Arg Tyr Leu Asp Trp Ile Lys Lys
5

<210> 58

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 101-109 of the TADG-14 protein

<400> 58

Val Gln Ser Ile Pro His Pro Cys Tyr
5

<210> 59

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 43-51 of the TADG-14 protein

<400> 59

Ser Gln Pro Trp Gln Ala Ala Leu Phe
5

<210> 60
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 6-14 of the TADG-14 protein

<400> 60

Pro Arg Ala Ala Lys Thr Trp Met Phe
5

<210> 61
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 26-34 of the TADG-14 protein

<400> 61

Ser Arg Ala Gln Glu Asp Lys Val Leu
5

<210> 62
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 126-134 of the TADG-14 protein

<400> 62

Leu Arg Asp Gln Ala Ser Leu Gly Ser
5

<210> 63
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 149-157 of the TADG-14 protein

<400> 63

Gly Gln Lys Cys Thr Val Ser Gly Trp
5

<210> 64
<211> 9
<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 96-104 of the TADG-14 protein

<400> 64

Gln Glu Ile Pro Val Val Gln Ser Ile
5

<210> 65

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 171-179 of the TADG-14 protein

<400> 65

Leu Asn Cys Ala Glu Val Lys Ile Phe
5

<210> 66

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 184-192 of the TADG-14 protein

<400> 66

Cys Glu Asp Ala Tyr Pro Gly Gln Ile
5

<210> 67

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 114-122 of the TADG-14 protein

<400> 67

Val Glu Asp His Asn His Asp Leu Met
5

<210> 68

<211> 9

<212> PRT

<213> *Homo sapiens*

<220>

<223> Residues 101-109 of the TADG-14 protein

<400> 68

Val Gln Ser Ile Pro His Pro Cys Tyr
5

<210> 69
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 236-244 of the TADG-14 protein

<400> 69
Ser Asp Lys Pro Gly Val Tyr Thr Asn
5

<210> 70
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 164-172 of the TADG-14 protein

<400> 70
Arg Glu Asn Phe Pro Asp Thr Leu Asn
5

<210> 71
<211> 9
<212> PRT
<213> *Homo sapiens*

<220>
<223> Residues 174-182 of the TADG-14 protein

<400> 71
Ala Glu Val Lys Ile Phe Pro Gln Lys
5

<210> 72
<211> 1343
<212> DNA
<213> artificial sequence

<220>
<223> Anti-sense sequence of TADG-14

<400> 72

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gtata gagacgc caggttgc ggacctccca caggggtctg agccccagga 150
tgtgatgccc tggagtgcac catcacacac cagggggcct ccagaatcgc 200
cctggcacgt gtcagccctt ttgctgctgc ctgcacagac catgccatct 250
gtgatctgcc ccgggtaaagc atcctcacac ttcttctggg gaaagattt 300

tacctctgca cagttgagag tgcagggaaa attctctcg ggactggta 350
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cagttgaaga agcatcagat catgggtgtg gtcctccaca tcgctgtgt 500
tgttagcaggg gtgtgggatg gactgaacca caggtatttc ttgctctggg 550
ccatcttat tctgtaggct gtggctccc aggctactg tgtatttcgg 600
tttttacag tggcagctg taaggaccca gttgccaccc acaaggacac 650
cgccacagag tagttgctgg cccttggaaaca aggccgcctg ccaaggctgc 700
gaatggggtt ggactcatg accccccagg accttgcct cctgtgccct 750
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gttttccac tgaccaatgt gtaattgggaa ttcaaagcta tacctgaatt 950
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aaattacaag ccatgacccc ctacattctt acattcataa ggtatttctt 1300
ccatttgagt tcggagagac ttggtaagct ctgcctgcta cag 1343

<210> 73

<211> 21

<212> DNA

<213> artificial sequence

<220>

<223> Sense primer for TADG-14, exon 2 to exon 3

<400> 73

cgacctcggt cgcccaagac g 21

<210> 74

<211> 21

<212> DNA

<213> artificial sequence

<220>

<223> Antisense primer for TADG-14, exon 2 to exon 3

<400> 74

cagctgttaag gacccagttt c 21

<210> 75

<211> 305

<212> PRT

<213> *Homo sapiens*

<220>

<223> TADG-14 variant protein

<400> 75

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Leu	Leu	Leu	Gly	Gly	Ala	Trp	Ala	Ala	Cys	Gly	Ser	Leu	Asp	Leu
							20		25					30
Leu	Thr	Lys	Leu	Tyr	Ala	Glu	Asn	Leu	Pro	Cys	Val	His	Leu	Asn
							35		40					45
Pro	Gln	Trp	Pro	Ser	Gln	Pro	Ser	His	Cys	Pro	Arg	Gly	Trp	Arg
							50		55					60
Ser	Asn	Pro	Leu	Pro	Pro	Ala	Ala	Gly	His	Ser	Arg	Ala	Gln	Glu
							65		70					75
Asp	Lys	Val	Leu	Gly	Gly	His	Glu	Cys	Gln	Pro	His	Ser	Gln	Pro
							80		85					90
Trp	Gln	Ala	Ala	Leu	Phe	Gln	Gly	Gln	Leu	Leu	Cys	Gly	Gly	
							95		100					105
Val	Leu	Val	Gly	Gly	Asn	Trp	Val	Leu	Thr	Ala	Ala	His	Cys	Lys
							110		115					120
Lys	Pro	Lys	Tyr	Thr	Val	Arg	Leu	Gly	Asp	His	Ser	Leu	Gln	Asn
							125		130					135
Lys	Asp	Gly	Pro	Glu	Gln	Glu	Ile	Pro	Val	Val	Gln	Ser	Ile	Pro
							140		145					150
His	Pro	Cys	Tyr	Asn	Ser	Ser	Asp	Val	Glu	Asp	His	Asn	His	Asp
							155		160					165
Leu	Met	Leu	Leu	Gln	Leu	Arg	Asp	Gln	Ala	Ser	Leu	Gly	Ser	Lys
							170		175					180
Val	Lys	Pro	Ile	Ser	Leu	Ala	Asp	His	Cys	Thr	Gln	Pro	Gly	Gln
							185		190					195
Lys	Cys	Thr	Val	Ser	Gly	Trp	Gly	Thr	Val	Thr	Ser	Pro	Arg	Glu
							200		205					210
Asn	Phe	Pro	Asp	Thr	Leu	Asn	Cys	Ala	Glu	Val	Lys	Ile	Phe	Pro
							215		220					225
Gln	Lys	Lys	Cys	Glu	Asp	Ala	Tyr	Pro	Gly	Gln	Ile	Thr	Asp	Gly
							230		235					240
Met	Val	Cys	Ala	Gly	Ser	Ser	Lys	Gly	Ala	Asp	Thr	Cys	Gln	Gly
							245		250					255
Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Asp	Gly	Ala	Leu	Gln	Gly	Ile
							260		265					270
Thr	Ser	Trp	Gly	Ser	Asp	Pro	Cys	Gly	Arg	Ser	Asp	Lys	Pro	Gly
							275		280					285
Val	Tyr	Thr	Asn	Ile	Cys	Arg	Tyr	Leu	Asp	Trp	Ile	Lys	Lys	Ile
							290		295					300
Ile	Gly	Ser	Lys	Gly										
							305							